RESEARCH COMMUNICATION

Cognitive and Dynamic Effects of Training Given to Women at Risk of Breast Cancer

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Abstract

  Background: Breast cancer is an important public health problem. Although the disease is widespread, the prognosis is good, especially with early diagnosis. For this to occur, a consciousness of protection of breast health for all women is necessary, and risk groups need to be particularly targeted. **Aim:** This study was conducted to determine dynamic and cognitive effects of training given to women in a risk group. **Method:** This study that is planned as an intervention study has been carried out in a city that is on the eastern part of Turkey between February and June in 2009. The data were gathered through a question form aimed at diagnosing the knowledge and applications of women about breast cancer, and hospital reports of women and control lists of BSE skills. The women in the risk group were given five sessions of training split into groups of 12-13 persons. For the purpose of realizing the cognitive effects of the training, pre-test and post test measures were assessed. The data were evaluated using number percentages and the McNemar test. **Results:** At the end of the training program, compared to previous training period, women's knowledge, at the cognitive level, related with the risk factors, symptoms and the early diagnosis methods of the breast cancer was seen to have been expressively increased. As for effects at the dynamic level, one month after the training program had been completed, women re-evaluated and 77.5% had conducted breast self-examination (BSE) at least one time, and 65.0% of them have passed through medical breast diagnosis and scanning tests by applying to hospital. **Conclusion:** In a study aimed to increase the conscious level and awareness related with breast health in women, variation at both cognitive and dynamic levels were evident at the end of the training program.

Keywords: Breast cancer - cognitive and dynamic variation - breast examination - scanning tests - training and nursing

Introduction

Each year on the world, just about to %10 of these are new case, 1.1 million women are diagnosed with breast cancer. While breast cancer is ranked in first among common types of cancer seen on the women, it is ranked in second among the causes of cancer related death (Williams et al, 2002; Parkin et al, 2005; Koçyiğit, 2007). It is expressed that one of 8 women in America, but one of 10 women in Europe has been gotten breast cancer (Key, 2001). According to the data obtained from the Ministry of Health in 2008, in Turkey, the most common cancer type in women is breast cancer (Ministry of Health, 2008).

Although breast cancer is common, it slows prognosis and when it can be diagnosed early, successful results can be attained. Therefore, early diagnosis and treatment have been gained importance in lifetime extension and reducing mortality (WHO, 2007). For this purpose, especially in women at risk in terms of breast cancer, the increasing of the cognitive level and awareness on the cognitive and dynamic level for early diagnosis and treatment is fairly important. The prevision of the cognitive and dynamic variation is not easy. Also, because the dynamic skills can

be ensured, mostly the cognitive level must be needed to be developed. One of the activities directed towards the early diagnosis aimed to both cognitive and dynamic variations is the breast self-examination (BSE). Yet, besides BSE, the women who are in risky group related with breast cancer are recommended the clinical breast examination (CBE) and mammography (MM) (Smith et al., 2003; Aslan et al., 2004). Mammography is a method which is to be used for diagnosing the breast cancer in women who are in asymptomatic period. However, the cost and technical requirements of it, limits the access to this diagnostic test. For this purpose, especially for women in low-income countries, BSE is recommended.

BSE is the process of their breast which is used to provide that women learning their breast structure and early notice the changes occurred (Akkaş, 2008). Discussions relating to the efficiency of BSE in the early diagnosis has been continued (Pillay, 2002). Although there are some researchers emphasizing the limitations of BSE (Bradbury, 2001; Andersan et al., 2003; Boyages, 2003), there are also some approaches emphasizing the benefits of BSE in developing countries such as Turkey where is not done regular health checks (Nakhichevan

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and Secginli, 2007). Especially self-determination of the mass of women doing regularly BSE, due to smaller and more localized, and being life-span longer are an approach pointing out the benefit of BSE (Weiss, 2003). In addition, BSE can also change the manner women take responsibility about their own health. Therefore, teaching the skill of BSE to every women is still seen as valid and appropriate aproach.

Such as in areas with limited resources, also in Turkey, breast cancer cases can be realized in advanced stages and one of the most important causes of breast cancer is the lack of knowledge (Madan et al. 2000; Nakhichevan and Seçginli, 2003; eye et al, 2004; Anderson, 2006; Dundar et al, 2006; Smith et al, 2006).Therefore, all women, especially in risk groups, needs to be developed the awareness of the protection of breast health in the cognitive level. For this purpose, the trainings aiming that the women are developed the cognitive awareness about the importance of breast health, and abnormal situations, symptoms of breast cancer, early diagnosis and treatment methods should be realized. It is fairly important that the women can have the cognitive awareness to evaluate the risks carrying in terms of breast cancer.

In terms of getting cancer, some women are under more risk than others (Parsa and Parsa, 2009).When being planned the service, in the cases which can not be taken the service to all of the society, primarily handling the risk group is important in terms of cost-effectiveness and success of intervention. Breast cancer is concerned with risk factors such as age, the history of breast cancer in family, the history of personal breast health, early menarch or late menapause, the fertility history, exposure to ionizing radiation, long-term hormone replacement theraphy (Brinton and Schairer, 1993; Clavel-Chapelon and Gerber, 2002; Koçyiğit, 2007; Parsa and Parsa, 2009).

In Turkey, the level of cognitive and dynamic awareness of women directed to breast health, compared with the women in western countries, is relatively on low level (Nakhichevan and Seçginli, 2003; Canbulat and Uzun, 2008). In some studies being done in Turkey, it has been determined that although women hear breast self-examination, the majority of them don't know how to do this application and don't also apply it during their life (Secginli and Nakhichevan, 2004; Coskun et al, 2007; Koçyiğit, 2007; Koç and Sağlam, 2009). Although the cancer scanning center has been opened recently in Turkey, the number of women applied to these centers are not yet at the level to be desired.

Women's attitudes/beliefs and the perceptions in health value measures are among the obstacles envisaged. In this study, it is aimed to evaluate the cognitive and dynamic effect of training given to the women living in eastern of Turkey and being in risk as related with breast cancer about breast cancer. Because women can give importance needed to breast health, it is necessary that women's cognitive levels and motivations should be increased and their attitude and behaviors should be changed. As in many areas to be needed the changing of behavior, also in this matter nurses can play a key role. American Cancer Association (2007) indicates the size of public education and the responsibility of nurses about

BSE. The preventive health services in this way are even more meaningful especially in countries that is limited to financial resources allocated to health.

In this study, it has been aimed to evaluate the cognitive and dynamic effects of the small group trainings which have been given to women, living in the eastern parts of Turkey and having risk in breast cancer, about breast cancer.

Aim: It has been done to aim at evaluating the cognitive and dynamic effect of training which has been given to women living in a province of eastern part of Turkey and having risk in breast cancer.

Materials and Methods

Type of Search
This study has been done as an intervention research.
The Universe and Sample of Research
The universe of study has constituted women living in health clinic region of a province in eastern of Turkey. The sample size of study has been calculated by NCSS (Number Chruncer Statistical System)-Statistical and Power Analysis Software-Pass (Power Analysis and Sample Size) program.In this program, an approximate sample size has been calculated by being expected that the average of knowledge score, after intervention in women applied to intervene, will be at least more than %15. The power of the research has been determined as %80, the margin of error has been determined as %5 and the sample size has been determined as 40 people.

The Sample Selection Criteria:
• Women living in a health clinic region and not having a problem about understanding Turkish
• Women having non-acute mental health problems
• Women who have at least two risk factors in terms of breast cancer have been included in the sample

Before starting the study, 300 women living in the selected area have been scanned and those being in risk group have been identified. The risk assessment form has been constituted by examining the relevant literature (Brinton and Schairer, 1993; Campbell, 2001; Clavel-Chapelon and Gerber, 2002; Darendeliler and Ağaoğlu, 2003; Smith et al., 2003; Somunoğlu, 2007). The questions in the risk assessment form are included those; advanced age (over 40 years), the experienced breast cancer history, family cancer history, the presence of lesions in breast determined with biopsy in personal medical history, experienced ovarian or endometrial cancer, exposure to radiation upon breast, becoming pregnant after 30 years age, not having ever given birth, obesity, not to any nursing, using long-term oral contraceptive, receiving hormone therapy, inadequate physical activity, smoking and using alcohol.
Data Collection
Data have been collected through information form regarding the socio-demographic characteristics of women, information form for diagnosing the knowledge and applications of women about breast cancer, the checklist of BSE skills and patient reports which have been prepared by being scanned from February to June in 2009 by the researchers (Brinton and Schairer, 1993; Campbell,

2001; Clavel-Chapelon and Gerber 2002; Anderson et al, 2003; Darendeliler and Ağaoğlu, 2003; Smith et al., 2003; Secginli and Nakhichevan, 2004; Kuhl, 2005; Somunoğlu, 2007). While in the first part of the form, the questions relating to socio-demographic characteristics (age, height, weight, educational status, number of children, marital status, social insurance) take part, in the second part of form, the questions relating to the risk factors of breast cancer take part. Yet, the information form related with knowledge and applications in breast cancer consist 19 items. The skill checklist consists of 21 items. Each item is assessed over 1 point and obtained point is completed to 100 point. If participants have high scores, it indicates a good ability to do BSE.

The Implementation of Survey
The implementation of the survey has been conducted in 3 stages.

1. Stage: By being used question form developed by researchers in order to determine the risky groups in terms of breast cancer, the scanning of area has been done in research area. During the scanning; the women having at least two risk factors in terms of breast cancer and being suitable for the criteria of sample selection have been invited to participate in the training program.

2. Stage:In order to ensure the realization of the training program in an appropriate environment, the cooperation with local governments has been done and has been administered in city council connected to municipalities. Before starting the training, the information form (pre-test) regarding breast cancer (such

as risk factors, symptoms and early diagnostic methods of it) has been applied to determine the current cognitive and dynamic levels of women. Women have been divided into groups of 12-13 persons and the training program has been completed in 5 per session. In first and second sessions; the cognitive awareness levels of women relating to breast cancer has been tried to be increased by giving the training by a nurse holding Ph.D. in nursing and being expert in her area. Also, in second session, a doctor from a hospital has been invited and medical inspection methods have been explained to the women by nurse and doctor. Women have been encouraged to apply to the hospital for the implementation of these diagnostic methods. In third and fourth sessions, the women has been tried to gain the ability of doing BSE in the dynamic level. In the last session, the suggestions directed to the changes in lifestyle and the eating habits to be protected from breast cancer have been given to women.

In this context, in each session, the training period has lasted 40-60 minutes. All groups have been implemented the same training program. The training contents have been comprehensibly prepared by considering the available educational level of women. As a training method, interactive methods such as questions and answers, expression, the presentation with power point and role play have been used. In addition, the training booklet and brochure prepared in accordance with the educational level of participants by researchers have been distributed. While the women have been tried to be gained the BSE skill, the breast model has been used and the application has been provided to do on their own breast and to repeat

Table 1. The Developing of Breast Health and The Contents of The Training Program

Sessions	Aim	Targets	Education Methods/Technique (Means-Materials)
1.Week	Improvement of the cognitive awareness in breast cancer	-Defining breast cancer -Knowing the prevalence of breast cancer -Knowing the results of breast cancer -Knowing the symptoms of breast cancer	Expression, Question-Answer, The presentation with Power Point (Data-Show, Brochure, Picture)
2.Week	Understanding the importance of early diagnosis in breast cancer	-Knowing the risk factors of breast cancer -Declaring the importance of early diagnosis in breast cancer -Declaring the methods of early diagnosis in breast cancer	Expression, Question-Answer, Discussion, The presentation with Power Point, Model Plot (Data Show, Brochure, The Breast Cancer Booklet)
3. Week	Learning to do BSE	-Expressing the importance of BSE -Knowing the time of doing BSE -Knowing the frequency of doing BSE -Evaluating breasts with eyes on standing -Evaluating breasts with hands on standing -Knowing the methods of examination of breasts with hands on lying	Expression, Question-Answer, The presentation with Power Point (Data-Show, The Breast Model)
4. Week	The ability of doing BSE	-Examining breasts with eyes on standing -Examining breast with hands on standing -Examining breast with hands on lying	Expression Being done by showing
5. Week	Learning to protect from breast cancer	-Understanding the importance of protection from breast cancer -Expressing the importance of changing the lifestyle for protection from breast cancer -Knowing the methods of protection from breast cancer	Expression, Question-Answer, Discussion (Data-Show)

it until doing properly. During the five-week long training, the awarenesses on the cognitive and dynamic level and the cognitive levels of women relating to breast cancer have been tried to be increased. At the end of the training, each woman has been fitted pink ribbon being the symbol of breast cancer.

The training contents relating to sessions, the informations relating to aim and target behaviours and the training method and technique are included in Table 1.

The Breast Examination

In this region having a traditional structure, one of the obstacles in medical examination also is the shyness of women about being examined by the male doctor. By considering this case, the cooperation with the female doctor working in Early Diagnosis and Screening of Cancer and Training Center of a State Hospital (KETEM) has been done and the women have been given information about being examined by the female doctor in the event that they applying to KETEM.

3. Stage: The information form, related with symptoms, early diagnosis methods and risk factors on breast cancer which has been carried out before the training is started in 2. stage of application, has been again carried out as last test measure after the trainings have been completed in a month. Similarly, after a month, for the purpose of determination of the dynamic skills of participants; it has been determined whether they have done BSE or not and if they have done BSE, whether they can do rightly or not by using checklist by researchers. Also, it has been determined whether women have been applied for breast examination and it has been determined by examining the medical examination results and hospital reports of women appliying for examination.

The Data Evaluation

The data obtained from the study have been determined by using number, percentages and McNemar importance test after having been transfered to SPSS data base

Results

The average age of women participating in the study is 46.07±8.49 and %42.5 of them is located only 50 years and above %60.0 of women have primary education level and %90.0 of them have social security; %90.0 of them have married and %57.5 of them have 3 or 4 children.

The risks being carried by women who have been taken to the survey have been determined as not any breastfeeding (5.0%), giving birth before 18 years old (47.5%), late menopause (20.0%), using HRT (17.5%), using contraceptive pills at least during 2 years (22.5%), smoking (32.5%), not to do exercise (95.0%), the history of breast cancer in family (10.9%), previously experiencing problems with their breast (37.5%), having no medical breast examination (75.0%), previously being taken biopsy from the breast (7.5%) (see Table 2).

One of the goals of the study is to increase the cognitive awareness relating to breast cancer on women. In the study, the difference between the women's knowledge before training and their knowledges after training relating to risk

Table 2. Distribution of Risk Factors of Women About Breast Cancer

	n	%
Regular Suckling Case		
Yes	38	95.5
No	2	5.0
First Menstruate age		
Early Menarş	11	27.5
Normal Menarş	29	72.5
Menopause Age(n=15)**		
50 years old and over	3	20.0
Under 50 years old	12	80.0
Using HRT Case		
Yes	7	17.5
No	33	82.5
The Case of Using Contraceptive Pill		
Yes	9	22.5
No	31	77.5
Smoking Case		
Yes	13	32.5
No	27	67.5
Exercising Case		
Yes	2	5.0
No	38	95.0
The Case of Familial History of Breast Cancer		
Existent	4	10.9
Nonexistent	36	90.0
The Case of Problem with Their Breast		
Yes***	15	37.5
No	25	62.5
The Case of Medical Breast Examination		
Yes(one time in a year)	10	25.0
No	30	75.0
The Case Of Taking Biopsy From Breast		
Yes	3	7.5
No	37	92.5

*Those giving birth before 18 years old have been determined in risk group; ** It includes those being in menopause; *** 7 people always have pain, 4 people have swollen condition, 4 people have mass problem on breast

factors, symptoms and early diagnosis of breast cancer have been statistically found importance (p<0.05). While, before the training, the familial history, smoking are the most common risk factors to be known, after the training women's knowledge relating to the risk factors of breast cancer has been found to increase significantly (p<0.05). However, after the training, it has been determined that women's knowledge relating to the risk factors of breast cancer including familial history, the presence of benign breast disease, the risk of exposure to radiation has not changed as comparing to before training and the difference between them is not statistically significant (p>0.05) (see Figure 2).

After the training, it has been determined that, in the evaluation made with McNemar test directed to women's knowledge about the symptoms and diagnostic methods of breast cancer, women's knowledge relating to mammography time (p=0.015), the first mammography age (p=0.001) and the symptoms of breast cancer has increased statistically and significantly while compared with after the training.

The other goal of this study is that the dynamic and behavioral changing relating to breast health are able to
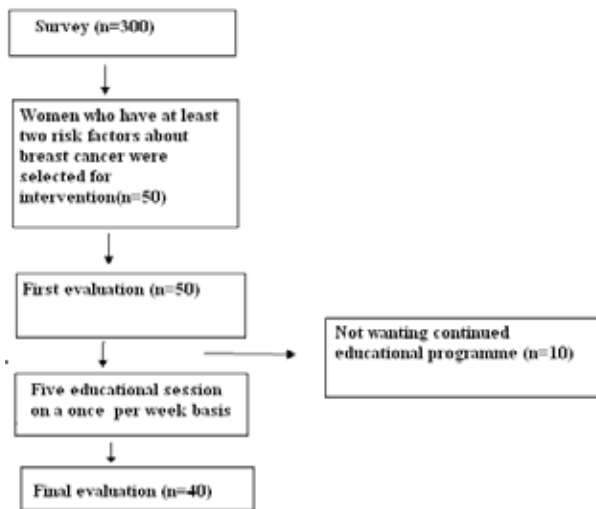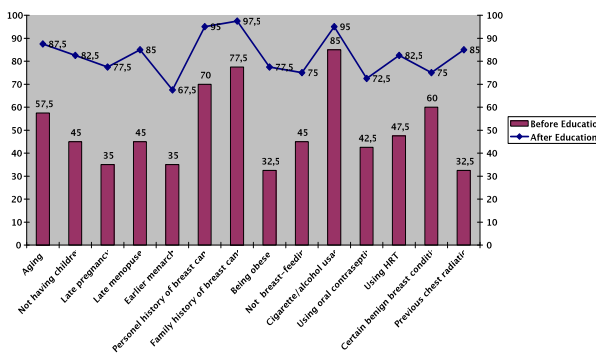
Figure 1. Participant Flow

Figure 2. Knowledges of Women about Risk Factors on Breast Cancer before and after Education

Figure 3. Effects of Breast Cancer Education on Women's Behaviour

be constructed. After the trainings have been completed in a month, 77.5% of women have stated that at least, they did BSE one time and the average score of BSE skill has been calculated as 80.23±17.03 (38,100). When the skill scores, which women have taken from the skill control list, have been looked, it has been found that 57.5% of them have realized the steps of BSE correctly and in appropriate order (see Figure 3).

Behavioral assessment, after the trainings have been completed in one month, is that women have applied to the cancer screening center for medical examination. In assessment done, it has been found that 65.0% of women have applied to the hospital for medical examination (see Figure 3). When the hospital reports are examined, it has been determined that BSE has been done to 34.6% of women; according to the result of BSE, mammography has been wanted from 34.6% of women and at the end of mammography, 30.8% of women have been determined with ultrasonography. As a result of medical examination, while any suspicious case has not been found on the majority of women, cystic formation has been found in the two women, benign mass has been found in one woman and two women has been forwarded for further tests because of potentially malignant masses.

Discussion

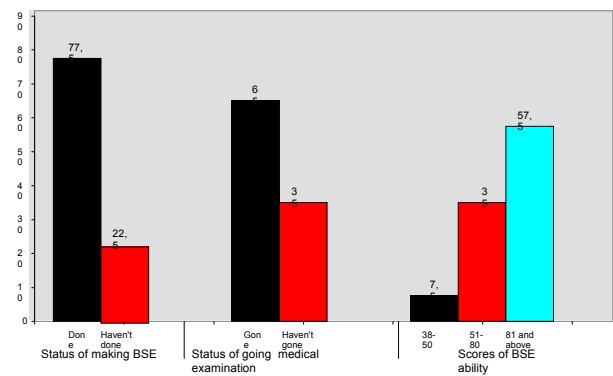The breast cancer among women has constituted a major health burden over worldwide and has been growing as a mojor public health problem. According to the report of IARC (International Agency Research Cancer, 2007), breast cancer is the most common cause of cancer among women in developed and developing countries and it constitutes 22% of all new cancer. Although breast cancer has been admitted as a problem of developed countries, also in the developing countries, breast cancer shows the fastest growth with the rate of 5% rise. Contrast to this, because infectious diseases have been thought as a priority public health issue in the developing countries, breast cancer in these countries has not been defined as a priority healh issue. This case causes that the disease is diagnosed at later stage in these regions and leads to be treated more expensive and less successful, so the mortality rate are higher than developed countries (Smith et al, 2006; IARC, 2007; Jemal et.al., 2009).

In developing countries, the fact that the lifes of women tend toward westernization has been thought among the factors increasing breast cancer incidence. Also in advancing societies, the gradually increasing of the behavioral and physiological properties seen in advanced societies such as particularly a reduction in fertility, shifting of the first pregnancy to older age, early menarche, late menopause, menopausal hormone therapy, postmenopausal obesity, physical inactivity are to explain the increasing in breast cancer incidence in certain extent (Bray et al., 2004; Kuhl, 2005; Smith et al. 2006; PAHO, 2007; Lee et al., 2008; Begum et al., 2009). In this study, a significant portion of risks relating to breast cancer has constituted cases such as giving birth before 18 years old, smoking, not exercising, late menopause, taking HRT or using contraceptive pills at least for a period of two years, the familial breast cancer history. Özmen et al.(2009) has determined in the study about the risk factors of breast cancer among the women in Turkey that the elements such as being higher of body mass index (>25), positive family history, age (>50) have increased the risk of breast cancer. In countries, developing and having limited sources, like Turkey, because considering the entire society will be more expensive, it is important that the priority should be given to the risk considering the entire society will be more expensive, it is important that the priority should be given to the risk groups. It is a very important approach that the increasing of awareness of presymptomatic individuals located in risk group and taking responsibility for their health, participating in diagnosis and treatment process should be proved (Falk-Rafael, 2001; Anderson, 2003;

Anderson, 2006).

Scientific studies reveal that people have three basic features which can be improved, changed and measured. They are cognitive affective and dynamic behaviors (Çok, 2003).The primary objectives of this study are to be supplied the cognitive, dynamic and behaviorial changing directed to breast cancer in women having at least two risk factors in terms of breast cancer. While the dynamic and behavioral changings can be directly measured and watched, the cognitive behaviors can be indirectly measured. At the same time, while the cognitive changing performs easily in humans, the behavioral changing takes time to occur (Taşkin et.al., 2007, p.4-5).

In this study, at the end of the training program given as directed to the increasing of the cognitive awareness related to breast cancer in women having at least two risk factor in terms of breast cancer, it has been determined that women's knowledges in terms of the risk factors, symptoms and early diagnosis methods of breast cancer have significantly increased when compared with pre-training period. The women's superficial knowledges related to breast cancer in pre-training period have been further consolidated and have been systematically deepened. While women have expressed to only know risk factors such as age,familial history and smoking especially in pre-training period,at the end of the training ,it has been identified that a significant proportion of women have had enough knowledge about risk factors in breast cancer, the diagnostic methods and symptoms of breast cancer. Also in the study of Dündar et al. (2006), it has been seen that a significant proportion of women in Turkey has insufficient knowledge about breast cancer. In a study done in Iran, it has been identified that more than half of women say they don't know BSE (Simi et al, 2009). In the study of Akhigbe & Omuemu (2009), they have identified that even health workers, being expected to be role model to the society, have insufficient knowledge about breast cancer and screening program. In literature, it has been often emphasized positive results of intervention studies aimed to increasing women's awareness about breast cancer (Wood & Duffy, 2004; Ciceklioglu et.al., 2005; Anne et al, 2009; Park et al., 2009). In an intervention study done as aimed to prevention of breast cancer by nurses in Taiwan, it has been determined that the frequency and sufficiency of doing BSE have increased (Lu, 2001). Similarly, in the study of Sim et al. (2009), it has been determined that the women's knowledge relating to breast cancer affected their behaviours and the women, whose knowledge scores are higher, did more BSE and screening process. In the intervention study done to prevent breast cancer in elderly women by Wood et al. (2002), it has been emphasized that at the end of the training, the cognitive and behavioral changing in women have been provided. It has been determined that the trainings given to women about breast cancer are usually short information studies and therefore have limited effectiveness in the behavioral changings. So, in this study, the projection of dynamic and behavioral results of training program given to women about breast cancer has been important.

One of the goals of this study toward achieving behavioral changing can direct the women on risk to breast health screening tests. Therefore during the training, the information aimed to increasing their awareness on the cognitive level about screening tests, forms of implementation, the importance of screening tests have been given to women. At the end of the study, a significant proportion of women have been seen to apply to the hospital for diagnostic tests after the training. In traditional societies, the studies aimed to increasing the awareness in breast health may have some blocker factors. The beliefs, relating to development and protection of religious beliefs, traditional approaches and health in societies formed by the majority of Muslims like Turkey, may be the factors determining the behaviours. In addition, some elements such as women's education level, family type, level of communication with their husbands (the necessity of her husband'premission for application), the request of not to showing her body to someone else cause disadvantage for women's health care. During the training it is extremely important that women's cultural, religious, and social characteristics should be taken into consideration. In this respect, in this study, in terms of women in order to increase the acceptability, the medical and breast examination have been provided to be done by female doctors. Also, prefering somewhere in the neighborhood they live as the training atmosphere have also provided the participation of women to the training regularly. Especially during the training, having the analysis of the individualistic risk assessment done to women and discussing the importance of matters have been thought as one of the factors increasing the orientation to the medical examination.

In this study, other element, aimed on the behavioral changes, is the achievement of BSE skill. After the trainings have been completed in one month, 77.5% of women have stated that they have done BSE at least one time and their BSE skill scores have been calculated as the average 80,23±17,03. Particularly in developing countries it has been also accepted by 58. World Health Assembly (2005) that the increasing of breast cancer only can be prevented with the breast cancer prevention and control programs and for reducing cancer mortality of countries, improving the quality of life of patients and their families, it has been envisaged to urgently develop and strengthen the cancer control programs. These programs include annual mammographic and ultrasonic screenings according to age and the annual clinical breast examination and monthly breast self-examination. All these methods are easy to make and cost-effective method (Groot et al., 2006; WHO, 2007). In this study in addition to the cognitive objectives, because it has been aimed that the inspection and palpation skills of women directed to breast tissue should be developed, visual presentation has been prepared, breast simulator has been used and it has been provided that women make the application on their own breast in order to reach this goal. After the trainings have ended, women have been observed during a month and it has been identified that the behavioral change has significantly occured. In the realization of expected changing, the women have not been at risk group. In a study done by Haji-Mahmoodi et al. (2002) and health workers it has been found that BSE skill of those having

breast health risk is higher than those not having risk. Therefore, giving the priority to those being at risk group is also important for the success of intervention besides cost-effectiveness. When breast cancer is early detected, to be taken successful results have removed the protection, screening and diagnosis roles and responsibilities of nurses to the highest level. It is highly effective and expressive that nurses plan and execute health training program for screening of women and early diagnosis. The increasing of women's knowledge level directly affects their behaviours about taking health responsibility. Especially, planning the socio-economic and cultural characteristics, value judgement of society by taking into account has been thought that the success of nurses will increase and heighten the public health by improving the quality of health services.

At the end of this study aimed to the changing on the cognitive and dynamic level in terms of breast health among women, targeted cognitive and dynamic changings have been realized. At the end of the study, it has been determined that women's knowledges in terms of the risk factors, symptoms and early diagnosis methods of breast cancer have significantly increased when compared with pre-training period. After the trainings have been completed, the majority of women have applied to cancer screening center for madical examination and stated that they started to make BSE. Also, according to the assessment list of BSE skill, it has been found that the majority of women have gained BSE skill. As based on these findings, it has been proposed that breast cancer training programs should be widespread in all societies, nurses should take place on breast cancer training programs more effectively and in this issue, controlled group studies should be planned.

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